

Satto Tonegawa '15.

SOURCE:FACEBOOK

MacGregor freshman found dead

Satto Tonegawa, son of MIT Nobel laureate, is 2nd death of term

By Ethan A. Solomon
EDITOR IN CHIEF

Satto Tonegawa '15 was found dead in his MacGregor dormitory room Tuesday evening.

Tonegawa, the son of MIT professor and Nobel laureate Susumu Tonegawa, was discovered shortly after 5 p.m. by MIT police in his J-entry room. Tonegawa had not been seen for a week and an odor was noticed near his room.

Tonegawa lived in Chestnut Hill, M.A., about 6 miles from MIT.

There is no reason to suspect foul play, the MIT News Office has reported.

"This is a very sad situation, and the entire MIT community shares a deep sense of loss and grief," said Chancellor Eric Grimson PhD '80 in a statement on the MIT News Office's website. "Our thoughts go out to the family, friends, classmates and dormmates of Satto, as well as to the graduate resident tutors, housemasters and others in the student-life system who knew and worked with Satto."

"Students should look out for their neighbors right now,"

said Undergraduate Association President Allan E. Miramonti '13. "Random acts of kindness can go a long way."

Tonegawa is the second MIT student to have died in less than two months. Nicolas E. Del Castillo, a sophomore, was found dead in his East Campus dormitory room on Sept. 4 in an apparent suicide.

As is protocol in the case of a sudden death, Massachusetts State Police and the Middlesex County District Attorney have begun an investigation into Tonegawa's death. The MIT News Office says they do not

know how long the investigation will take.

Tonegawa was an avid musician, playing both piano and cello. He attended the Milton Academy before coming to MIT this fall, according to the Academy's website, and graduated cum laude. Like his father, Tonegawa had an interest in the life sciences — he worked in the Orr-Weaver lab at the Whitehead Institute as a high-school student.

Prof. Tonegawa, recipient of the 1987 Nobel Prize in Physiology or Medicine, is a contro-

Tonegawa, Page 13

Baker student robbed

Laptop stolen by possibly-armed intruder

By Jessica J. Pourian
and Maggie Lloyd
EDITORS

A possibly armed robber stole a laptop from a student on the fifth floor of Baker House yesterday evening at 5 p.m. The student was approached from behind and felt something stuck in his back. The assailant demanded the student's laptop, acquired it, and then fled the scene. Though no weapon was clearly identified, the victim saw the suspect with "something shiny" as he fled, according to a police bulletin. The suspect was described as a tall black male wearing a dark raincoat and carrying a black backpack. He has not been apprehended, and nobody was injured in the incident.

Police cleared all students out of Baker House around 6:10 p.m. with

a fire alarm, possibly to search the area for the suspect. Students were readmitted to the building around 6:50 p.m. Police continued to circulate through the building for several hours, walking through halls encouraging students to close their doors and stay wary. One police officer remained at Baker desk throughout the evening, and an extra night-watch guard was assigned to patrol the dorm.

A meeting held last night in Baker addressed the incident and the community's safety concerns.

"No one was hurt," wrote Donna M. Denoncourt, director of residential life programs, in an email to baker-official recommending students come to the meeting to learn more about "support systems on campus."

Robbery, Page 12

MIT has a new EVPT

Ruiz is new executive VP and treasurer

By Bruno B.F. Faviero
STAFF REPORTER

Israel Ruiz SM '01 was appointed as executive vice president and treasurer (EVPT) by the MIT Corporation on Oct. 14, a position held for five years by Theresa M. Stone SM '76. In that position, Ruiz will be among MIT's senior leadership, working with President Susan J. Hockfield alongside the provost and chancellor. Most members of the MIT community are familiar

with the latter three positions — all of whom have direct involvement in academics or student life — but many may wonder, "What exactly does the EVPT do?"

"The executive vice president and treasurer wears two hats," Ruiz, formerly MIT's vice president for finance, explained. One is a managerial role as the executive vice president, and the other a financial role as the treasurer. In the role of EVP,

EVPT, Page 17

IN SHORT

Pumpkin drop is this Saturday at 11:59 p.m. in front of Building 54. Watch pumpkins explode as they plummet off the Green Building!

Electronic transcripts are now available! See <http://web.mit.edu/registrar/records/transcripts/official.html> for more details.

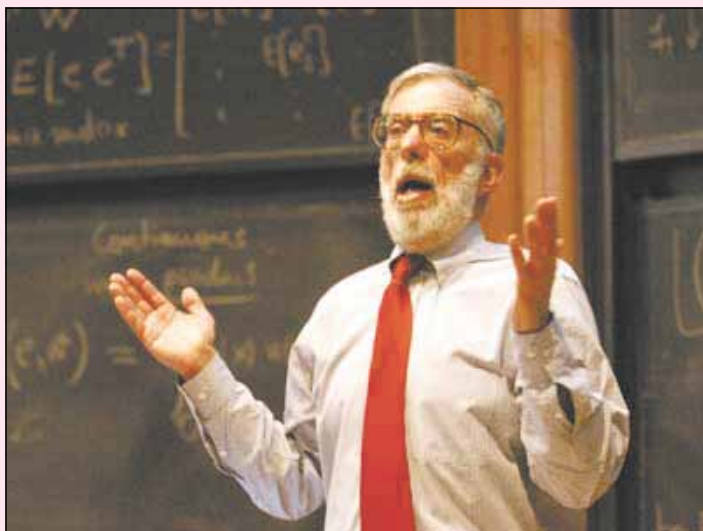
Send news information and tips to news@tech.mit.edu.

Silbey, former dean of science, dies at 71

Professor Robert J. Silbey passed away Thursday at age 71 after a battle with cancer. Silbey, a faculty member at MIT for 45 years, held several positions, including dean of MIT's School of Science (2000–2007), director of Materials Science and Engineering (1998–2000) and head of the Chemistry Department (1990–1998).

"Bob Silbey was a total citizen of MIT," said Charles M. Vest, president of MIT from 1990 to 2004, in an article by the MIT News Office. "He was a first-rate scientist, an excellent teacher, a skillful administrator, and a caring steward of the MIT student experience. As chemistry department head and dean of science, he built bridges across disciplines and brought a strong sense of humanity as well as a great sense of humor to his work. Although he never sought the limelight, he has left a big legacy at the Institute and will be greatly missed."

According to the News Office, Silbey was known as a caring mentor; many of his students went on to positions of leadership in academia. During his time as dean, four Nobel Prizes were



DONNA COVENEY—MIT NEWS OFFICE

Robert J. Silbey talks at MacVicar Day in 2005.

awarded to faculty members in the School of Science. Silbey, also a fellow of the National Academy of Sciences, oversaw the construction of the Brain and Cognitive Sciences Complex (Building 46) and supported the TEAL (Technology Enhanced Active Learning) program that changed

the way freshman physics was taught at MIT.

A Robert J. Silbey Memorial Fund has been established at MIT in his memory — donations can be sent to the provost's office. A memorial celebration will occur in early 2012.

—Stan Gill

Fifth week flags issued to frosh

249 flags went to 215 freshmen, most in science & math core

By Bruno B.F. Faviero
STAFF REPORTER

Fifth week flags, the annual warnings from instructors that a student is failing or in danger of failing a class, were sent out over a 10-day period beginning Oct. 12. 249 flags were given this year to 215 students, roughly 19 percent of the freshman class — about the average proportion of students flagged every year. Thirty-one students were given two flags, and two students were given three flags.

Most flags were given in the math and science core with a minority given in HASS classes, said Senior Associate Dean for Undergraduate Education Julie B. Norman, who also directs the office of Undergraduate Advising and Academic Programming (UAAP). She also

Flags, Page 13

19% of Freshmen received a fifth week flag
this is about average

181 students had 1 flag

31 students had 2 flags

2 students had 3 flags

SARAH RITTER—THE TECH

ELECTORAL COLLEGE NO MORE?

Why our voting system is way outdated.
OPINION, p. 4

WELCOME HOME, GILAD

Despite heavy cost, soldier's return is a good thing.
OPINION, p. 4

DEMYSTIFYING DEBT

Understanding the eurozone debt crisis.
OPINION, p. 5



ENGINEERING GREAT ART

Ganson's exhibit at the MIT Museum is a marvel of art and engineering.
ARTS, p. 10

THE THING IS ... SOMETHING

Prequel to the classic sci-fi flick is an OK Halloween show.
ARTS, p. 10

SECTIONS

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Sports ... 20

OPINION

Shalit's return should be celebrated

Despite heavy costs, soldier's homecoming is good for Israel

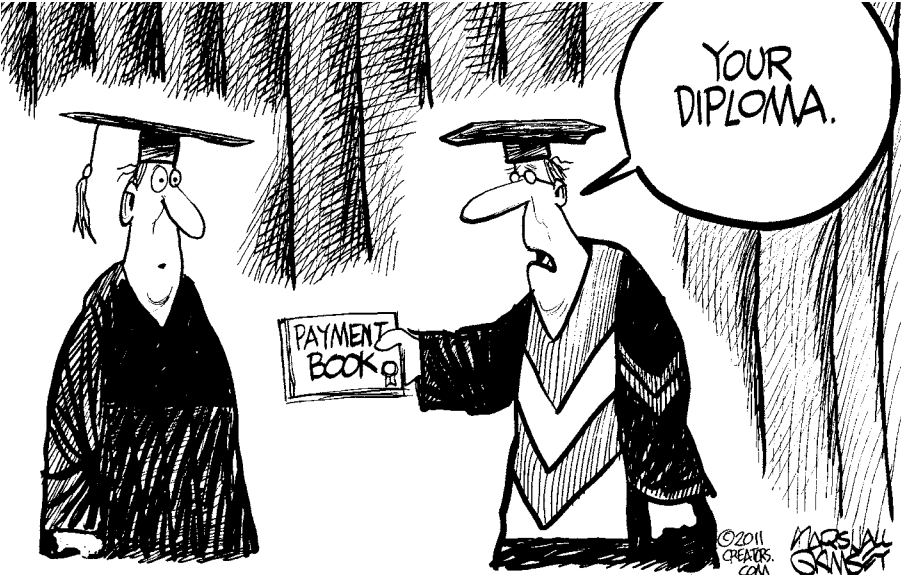
Bandler, from Page 4

ing a hero's welcome in Gaza, and calls for kidnapping more Israeli soldiers are echoing in the streets. It is obvious that a 1027:1 exchange rate is disproportionate and an excessive ransom, and that the danger posed by the released Palestinian terrorists is very real. The question that arises is: why would Israel make what appears to be such a foolish trade?

The answer stems from a deep sense of unity that penetrates all levels of Israeli society. Because Israel is so small and is the only Jewish state in the world, no one is really a stranger, and almost everyone has a mutual contact in common. For this reason, Gilad was not some obscure Israeli soldier who happened to be captured, and was not some remote and unfortunate casualty of war to remember. Instead, Gilad

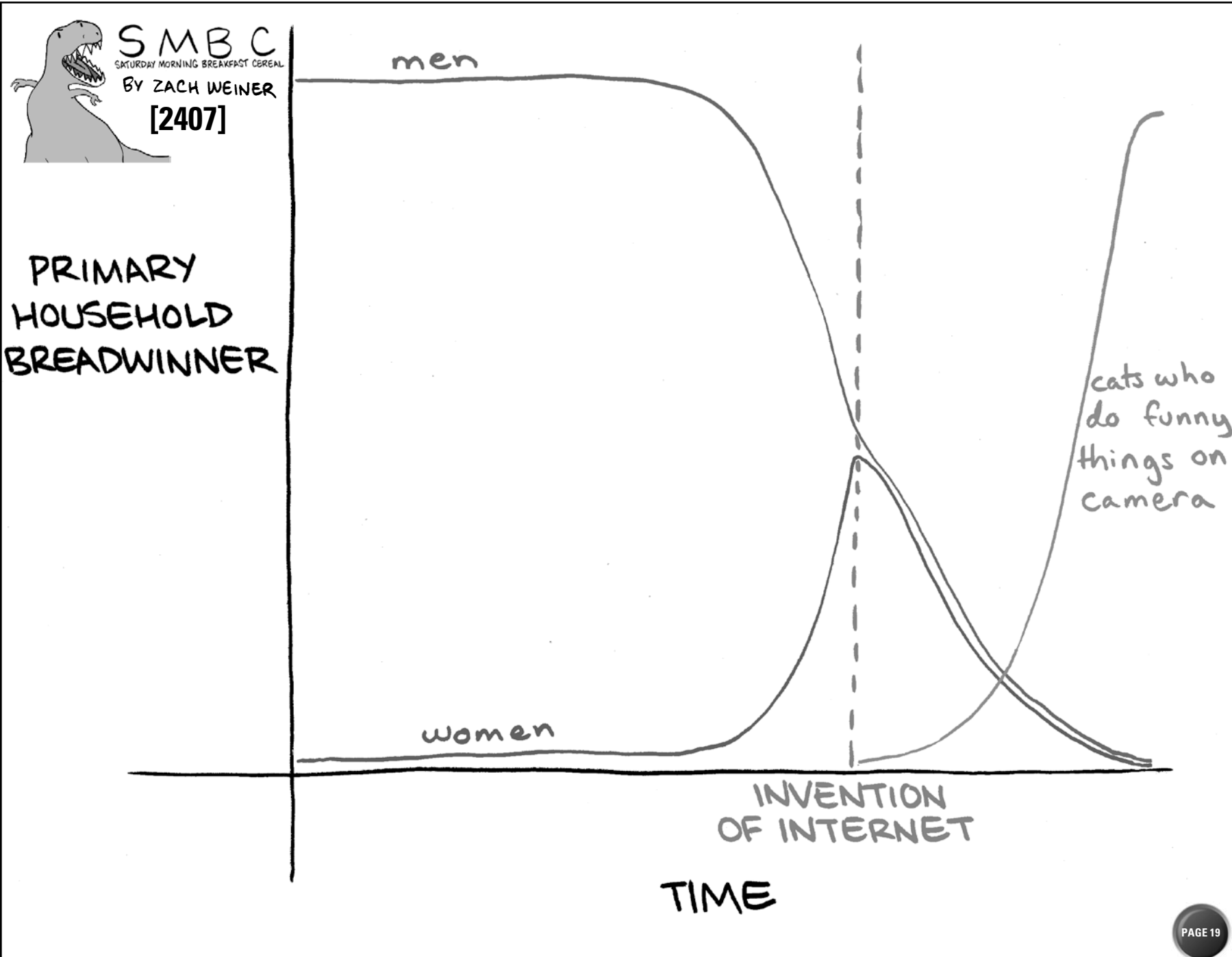
was transformed into every Israeli family's son, someone they thought about and missed every single day; his release became a national plight, and although trading so many terrorists for his one life may be unwise from a rational perspective, Gilad's case was propelled beyond the realm of pure logic. As Einstein so eloquently put it, "politics is more difficult than physics," and the situation surrounding Gilad's release is

a prime example that nothing is truly black and white. Sometimes questions like "what if it were your son" get in the way of the logical or sensible choice, and lead to decisions that are not entirely levelheaded. Regardless, Gilad's return home should be enthusiastically celebrated, as should the Israeli people's love for a soldier who the vast majority of them had never even met.



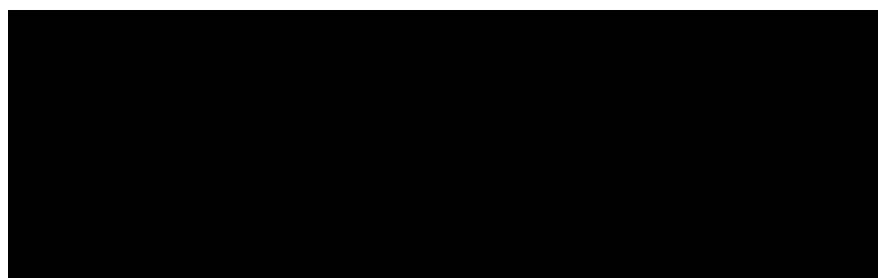
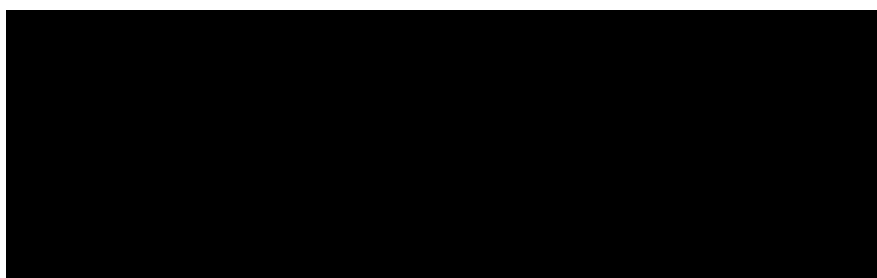
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Thursdays @ 6:30 p.m.
Or, email join@tech.mit.edu.



How Culture Ends: Not with a bang... with a whisker.

Dilbert by Scott Adams



Sudoku

Solution, page 19

				6				
4			8		5		2	
7	3	5				8	6	
	9			5		3		
	5	4				6	7	
		6		2			5	
	7	3				2	8	4
	8		3		4			6
				7				

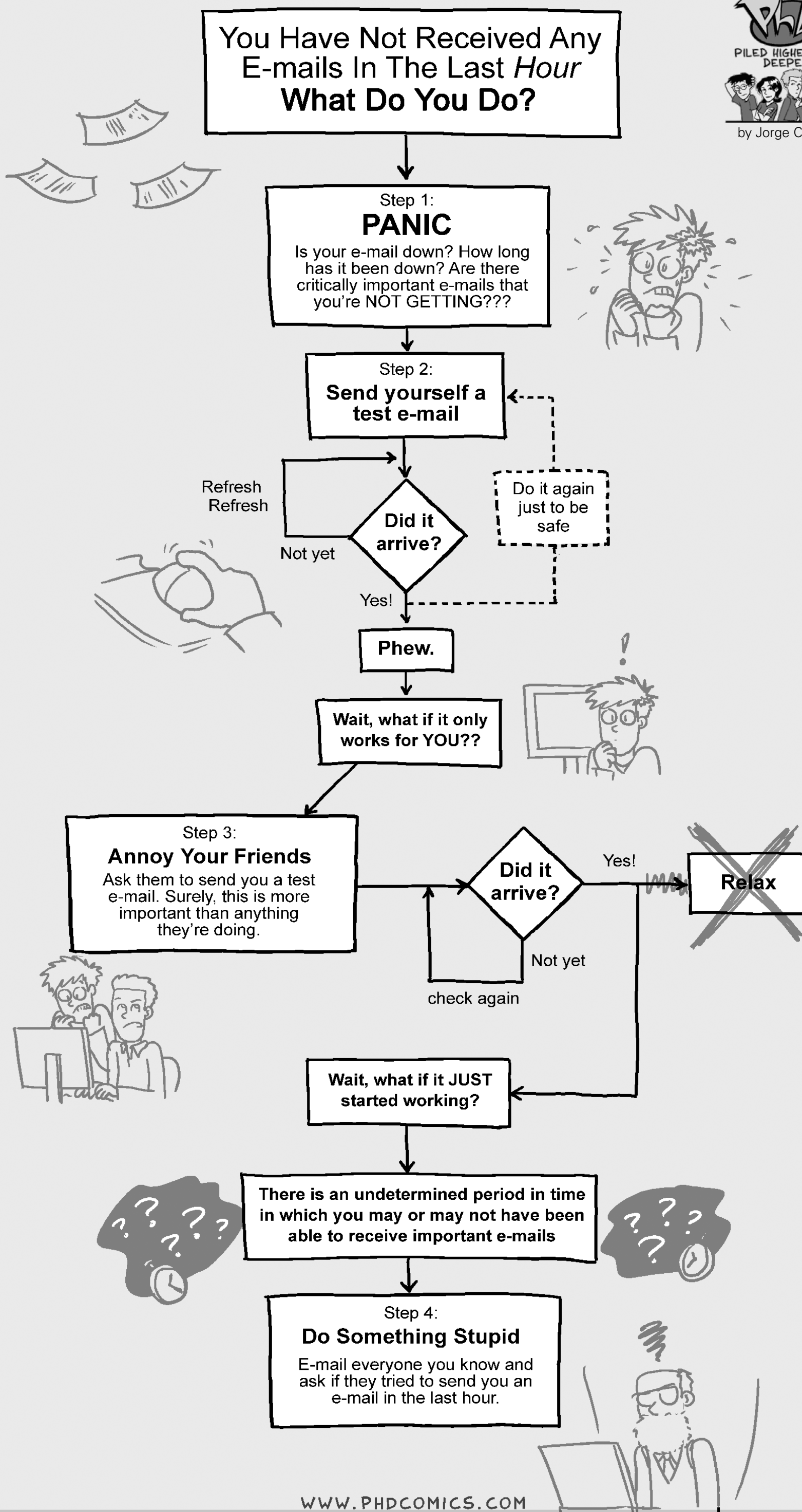
Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Techdoku

Solution, page 19

18+		240x			
		3		24x	
	30x				3
36x		1-		30x	5
	2		3-		4÷
120x				2	

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.



Whirring into motion

By Adisa Kruayatidee
STAFF WRITER

For three decades, Ganson has been exploring an intriguing mesh of mechanical engineering and art, gritty gears and delicate choreography. All the impressive open metalwork of his art is hand-shaped, brazed, and bolted together. His crafting began in his dorm room at the University of New Hampshire; amazingly, Ganson had no engineering background — before switching to art, he was a premed.

If Ganson's imaginative concepts could be epitomized in one sculpture, it would probably be *Another Dream*. Four groups of gears, each connected to at least one other, form a tapered tower that nearly touches the ceiling. Start any single gear near the top, and you can follow a connected path from it down to the floor; the gears turning one another highlights what Ganson described as the "logi-

So what do viewers think of this interactive experience? As one person wrote in the museum's visitor's book: "You're either a psycho or a genius, or both. Either way, you rule!"



COURTESY OF ARTHUR GANSON

Detail of the coupled gear systems in “Machine with 11 Scraps of Paper” from Arthur Ganson’s *Gestural Engineering* exhibit.

The Thing is ...

By Jenny Xie
STAFF WRITER

With its basic storyline and literal graphics, *The Thing* feels primitive, but it is not

COURTESY OF UNIVERSAL PICTURES

After 102 minutes, *The Thing* is not the deepest, most impressive or pleasant film by any terms, but it could be the ultimate gross fun for this Halloween weekend.

Dormitory intruder

Extra security stationed at Baker

Robbery, from Page 1

About 50 students attended the meeting, which was initially intended to be a Baker-wide study break.

“It’s been a strange week,” Denoncourt said at the meeting, “We want to make sure that you are all aware of what’s happening.”

Denoncourt reminded students of the phone numbers for the MIT Police, S^3, and MIT Mental Health and encouraged them to look out for their friends.

“If you have a friend that you’re worried for,” she said, “Please, reach out to them.”

The additional security officers stationed at Baker were just “an extra level of security,” clarified Denoncourt. There was no concern that the suspect was still in the building, she said. She also cautioned students to be aware of “tail-gaters” — nonresidents who come through card-access doors behind a resident.

It is standard protocol at Baker for nonresidents to sign in and out at desk, and have their Baker host escort them into the building.

Alissa A. Totman ’13, a Baker resident, noticed a lot of police cruisers as she entered Baker yesterday evening. About ten minutes later,

the fire alarm went off, and she saw police in the lobby.

“I knew it wasn’t a normal fire alarm because of all the cop cars,” she said.

Totman, also a Baker desk worker, says the incident has made her “more concerned about working desk” and “makes me want to pay more attention.” She notes that “other dorms are way more strict than we are” when it comes to letting people in.

Emails circulated through various desk mailing lists cautioned desk workers against nonresidents. Desk workers were urged to check IDs before letting unidentified people into the dorm, and to call the police if they saw anything suspicious.

Emma F. Broderick ’14, a sophomore who worked at Baker desk from 8 p.m. to 10 p.m. yesterday, was in her room when the Baker fire alarm went off around 6 p.m.

You never expect this to happen, she said, but “when it actually does, it emphasizes [the importance] that the people coming into the dorm are the people we want coming in.”

Students who see suspicious persons in their dorm should talk to their GRTs immediately or contact the MIT police.



JOSEPH MAURER—THE TECH

A water pipe broke under the Main Lot, between Buildings 3 and 5, shortly before 3:30 p.m. on Oct. 26. Water pressure cracked and lifted the asphalt in the middle of the parking lot, and overwhelmed the drains near the driveway under the Infinite Corridor in building 7. A pipe in the same lot burst in August, 2010, though that flooding was more substantial and took longer to subside. The water subsided about two hours after the initial flooding.

Researchers at the Rohsenow Heat and Mass Transfer Laboratory, immediately next to the flooded driveway in the basement of the Infinite, expressed concern that waves from cars driving through would flood their lab — as happened in 2010.

Microsoft Online Services Division in China

Lead the Change in Your Career

Time and Location

10am-1pm, Saturday, November 5th, 2011, Microsoft New England Research & Development Center,
11th Floor Common, 1 Memorial Drive, Cambridge, MA 02142

Featured Speakers

Harry Shum, Corp. Vice President, Search Product Development, OSD
Yongdong Wang, General Manager, Search Technology Center Asia (STCA)

Please R.S.V.P to Susan Goodwin <sgood@microsoft.com> if you plan to attend.

Event Summary

China has enjoyed unprecedented economic growth over the past few decades – growth that shows no signs of abating. This growth is particularly astonishing in the fast-evolving Chinese Internet. China now has the world’s largest Internet population with over 400 million Internet users.

In this forum senior leaders from the Microsoft Online Services Division (OSD) China and U.S. teams will discuss OSD’s commitment and strategy, as well as online market potential in China. They will provide an overview of OSD’s current R&D investment in the country and the role China plays in growing the OSD business. You will learn from their vision and firsthand experiences building a sustainable, world-class engineering organization that fosters innovation and is transforming OSD in China and globally.

Microsoft STCA China is hiring! Why Microsoft China? Why Beijing? Why Now?

- Opportunity to establish your network internationally
- International experience is key to career growth
- Beijing is growing exponentially and opportunities today might not present themselves anymore in the next 3-5 years
- Beijing is more environmentally friendly
- Beijing’s infrastructure is much improved
- Beijing’s entrepreneurial environment is prime

Join the discussion, make new friends, have some fun, and see how you can get involved!
Food and beverage will be served.

Redline will not function past Harvard on weekends

The MBTA’s Red Line will stop weekend service to stations north of Harvard Square beginning Nov. 5. This change, expected to last until March, will allow workers to make repairs to cracked tunnels and corroded track beds that could pose a safety risk if not addressed. Operation will remain unchanged Mondays through Fridays, and service will not be shut down on the weekends of Christmas and New Year’s. Porter, Davis, and Alewife are the affected stations, which together carry over 20,000 passengers on Saturdays and nearly 15,000 on Sundays. The MBTA will add substitute bus routes to accommodate passengers north of Harvard Square. The repairs will cost \$80 million, and the project has received \$4.3 million in federal stimulus money. A 2009 report on the MBTA stated that continuing to ignore repairs on the 2.25-mile section could result in a significant danger of derailment. The MBTA is expected to spend a total of \$420 million this year on repairs and maintenance throughout the system.

—Austin Hess



Are you dying to tell someone your latest ephiphany?

Write about it!

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Fifth week flags warn students of failure

Reactions to fifth week flag can determine student success in class

Flags, from Page 1

commented that many flags were given in 7.012 (Introductory Biology) due to the increased number of students in the class this year.

The flags are emails, CC'd to a student's adviser and the UAAP. Most flags are specific to individual students, and can include observations by the instructor like, "I noticed you didn't do well on the last exam," or "you haven't been to recitation lately," said Norman. Most flags also involve a follow-up from the UAAP with information on resources and suggestions on how to improve performance. Norman said that flags are intended to be something like, "Let's pause. Where do you stand right now, and what do you need to do to be more successful?"

All flags are forwarded to housemasters and varsity coaches, and students with multiple flags get more attention from the UAAP. They also get an email from the dean of undergraduate education on how students can get support, particularly when it comes to personal problems.

Each student with multiple flags is expected to develop a "recovery plan" with the help of their adviser and Donna Friedman, associate dean for advising and academic programming. The UAAP also encourages these students to sign up for Seminar XL: Limited

Edition — a not-for-credit version of Seminar XL — which matches 4-6 students with a TA for two 1.5-hour sessions every week to review material and do practice problems.

Norman said many flags result from the inability of students to manage their time and other aspects of adjusting to college learning. "You can't coast here like you did in high school," she said, "sometimes you end up digging a hole that you can't get out of."

Norman said that students sometimes "need assistance finding the trees in the forest ... they need help directly going to resources." She added that some issues affecting student performance may be more personal, in which case students should go to S^3 to seek help with managing academics in their lives.

However, Norman said that the success of a student is entirely dependent on their reaction to the flag, adding that most students she hears from react very positively and tend to be proactive, though she emphasized the importance of setting realistic goals.

"The first response of some students is, 'I'll dedicate 10 additional hours [to the class], I'll go to the library, and I'll go to every office hour,' but these are unrealistic plans and they set themselves up for failure," Norman said. "They

need to be more thoughtful about accessing resources."

"It was a wake-up call," said Francisco X. Pena '15, who got a flag in biology.

"It made me realize that I'm doing too many extracurriculars and that I should probably start paying more attention both to and in bio. ... I am going to get a tutor," he said. "I think [the flags are] necessary."

"When I read it, I thought 'clearly, [I'm] doing something wrong.'"
— Kere Eke '15

Onyekwere "Kere" Eke '15, flagged in 7.012, had a more negative reaction initially. "It made me feel dumb," she said, "I was like, 'Kere, why are you here at MIT?' It made me feel like someone stabbed me — it was also the way the instructor wrote it, it was very harsh. I guess they thought it was necessary for them to word it that way so that you know you need to get shit done."

But the flag motivated her to change her habits. "When I read it, I thought 'clearly, you're doing something wrong,' and so I sat down and mapped out the rest of the semester. ... I've never been so productive in my time here at

MIT. I make time for reading now and, since I do the reading before the lecture, I have a better understanding of the lecture. Without the fifth week flag I would be doing nothing right now. I'm actually kind of glad I got it. It was useful, helpful."

Emma E. Feshbach '15 saw the flags as needing some improvement. "I knew I would get one because I failed the first test, [and] it was not very specific in offering resources besides my adviser," she said, adding that it would be helpful if the email could offer more direct resources such as tutors, or if the email came from the department. "I think if someone didn't know what their status was in a class it could be helpful. It just seems sort of weird sending out an email saying 'by the way, you're failing.'"

Last year, the flagged recovery rate — defined by a student passing a flagged class, as opposed to dropping or failing — was 81.5 percent, higher than past averages of 68-70 percent. The UAAP expects it to remain that high.

The recovery rate, said Norman, was "a direct result of student initiative — tutors, Seminar XL:LE, study sessions, meetings, etc."

Undergraduate resources and support can be found at <http://mit.edu/uaap/resources.html> and <http://web.mit.edu/uaap/s3/>.

Satto Tonegawa found dead on Tuesday evening

Tonegawa, from Page 1

versial figure. In 2006, Tonegawa resigned as director of MIT's Picower Institute for Learning and Memory after an investigation found he had inappropriately discouraged neuroscientist Alla Y. Karpova from taking a job at MIT because their research interests overlapped. Prof. Tonegawa was in Japan when he was alerted to his son's death, the *Mainichi Daily News* reported, but has since returned to the U.S.

News of Tonegawa's death traveled quickly through Facebook, said Anne Michelle T. Juan '12. As of last night, *The Tech's* web update on Tonegawa's death had been shared nearly 150 times.

It was "shocking to me that he was a freshman," said Bonny Jain '14, who said that was also the general sentiment among his friends.

Hidde Tonegawa '09, Susumu's other son, graduated from MIT in 2009 and majored in Brain and Cognitive Sciences.

"It's very difficult," Hidde told the *Boston Globe* on Wednesday. "Everyone's still in shock."

Members of the community who feel affected by this death are encouraged to contact Mental Health Services at 617-253-2916, or talk to their housemasters or GRTs.

Elevator Pitch Contest Finale

November 2 at 7pm
Kirsch Auditorium
Stata Center 32-123

\$100K
MIT ENTREPRENEURSHIP COMPETITION

File Edit Options Buffers Tools Im-Python Python Help

from new_skills import *

def learnMarketableJobSkills():
 return linux, OSX, javascript, applescript, perl, python, PHP

if self.interest == True:
 print "E-mail join@tech.mit.edu"

----:----F1 joinTechno.py (Python)--L1--Top-----

Challah for Hunger Fundraiser

Come support relief efforts in Darfur by buying delicious, freshly baked and grilled Challah French Toast!



Details

Date: November 1, 2011

Location: Lobby 10

Time: 11:15am-2:15pm, or we sell out

Prices: 1 slice = \$3

2 slices = \$5

Topping bar: maple and chocolate syrup, whipping cream, and more!!!

Challah for Hunger raises money for disaster relief, while educating the community about world hunger. It does this through the production and sale of challah, a type of bread. The profits are donated to the national

Challah for Hunger cause: the American Jewish World Service's Sudan Relief and Advocacy Fund and a monthly charity of choice.



Prototype for \$1K house has final price tag of \$6K

Idea inspired by One Laptop per Child; designing the house is a ‘collaborative’ project

By Deborah Chen
ASSOCIATE NEWS EDITOR

What can you build for \$1,000? Last summer, Professor Yung Ho Chang in the Department of Architecture and Ying chee Chui ’11 — then a graduate student in the department — designed and built a house in Sichuan, China using local materials for that much.

The house, known as the “Pinwheel” prototype, is based on a single module that has a central courtyard space with rectangular rooms branching out on all sides. Once one unit is built, it can be duplicated and rotated to construct an entire house. The house also makes use of hollow brick walls with reinforcing steel bars, wooden box beams, and structural insulation panels to help it withstand earthquakes.

Chang said he was first inspired in 2009 when his colleague, Tony Ciochetti, chairman of the MIT Center for Real Estate, came to him with the idea to build a house for \$1,000 after seeing the One Laptop per Child project, of the foundation of the same name headed by Media Lab co-founder Nicholas P. Negroponte ’66.

“The 1,000 number was completely arbitrary, but I got excited and wanted to know if it could be done, so we decided to do a project in studio that spring to work on the idea,” Chang said.

Chang and a group of graduate students created a set of designs, one of which, the “Pinwheel,” was selected to be built last



COURTESY OF YING CHEE CHUI

Yung Ho Chang and Ying chee Chui designed a \$1K house prototype based on a single module with branching rectangular rooms.

summer in Mianyang, Sichuan Province, China.

Chang says that it took about a year to establish ties with an NGO in Beijing and secure funding for the construction of an actual prototype. In the summer of 2010, Chui headed to Sichuan to build the prototype on

site.

“The final price tag was about 6K, but the house was 30 percent bigger than we had originally planned,” she said.

Unique design process

Chang emphasized that what makes the 1K house unique is not just its low cost, but the interactions between the architect, the engineers, and the end user that occurred during its construction.

Usually, according to Chang, the three parties don’t interact at all.

“Practically speaking, architects can’t build their own design, and inhabitants can’t either — they don’t have the equipment, crew of people. It was very unusual, in our case then, that we worked directly with all parties. Even the person who ended up living in the house was physically building it.”

Chui says that the process of working with structural engineers and being heavily involved in the construction was a rewarding experience.

“I learned a lot about the engineering perspective — we designed the house in studio, but we had to select the material at the time during construction. It was a challenge because we were building in a rural area and we had to look for materials that were close-by, and met the structural and cost requirements.”

Chang said designing the house within tight cost constraints was a valuable experience as well. “Architects have very strong de-

sign tendencies,” he said.

“For example, we don’t like some colors, maybe some of us don’t like colors at all, but in this project, we had to let go of a lot of these things. In Chee’s case, I knew she didn’t like the color of the roof panel, but it turned out that color was the cheapest one.”

Chang hopes that the locals can take away design principles from their involvement in the construction.

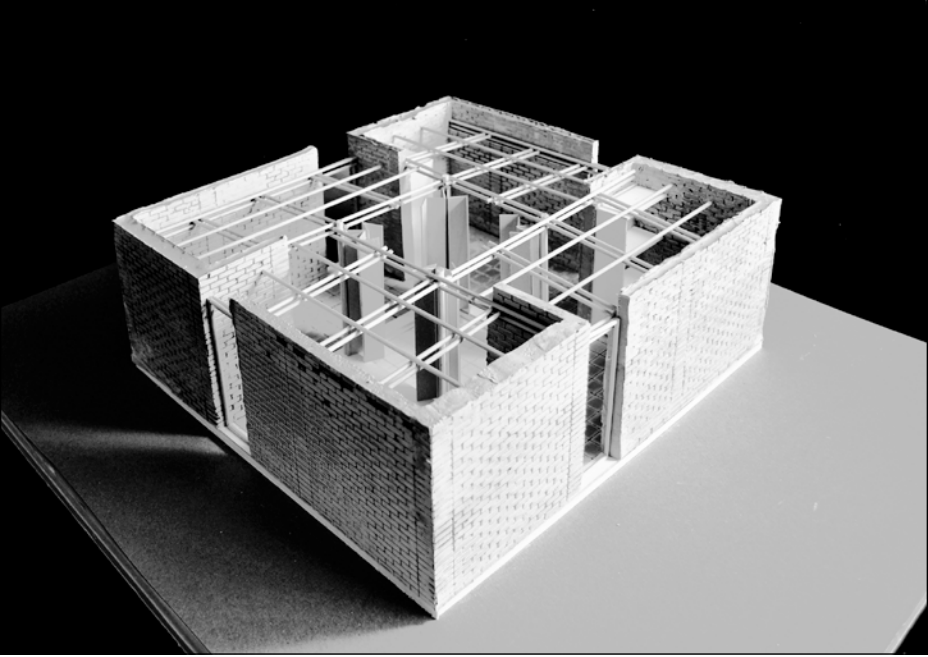
“You don’t have to give up on design, but you realize what’s important is the most essential elements,” he added.

Chang hopes that the locals can take away design principles from their involvement in the construction of the house.

“Most houses in the area use solid brick which doesn’t stand well against lateral stress as well as the hollow bricks we used, so we hope that they can incorporate that design principle into their own building convention and future designs.”

Now that the prototype \$1K house has been completed, Chang is working on a \$10,000 house for Japan that could be built quickly after natural disasters.

“We wanted to get the \$1,000 house out as a message. It’s not about building one house, but the first house,” Chang said.



COURTESY OF YING CHEE CHUI

The \$1K house prototype in Sichuan, China, actually ended up costing \$6K, but the building was 30 percent bigger than originally planned.

TAKE ON A COLUMNIST

Think you have what it takes to tackle a Wall Street Journal argument?

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For Romney, Bay State no longer a punch line

Romney portrays Massachusetts as a symbol of bipartisanship, not telling of resistance

By Matt Viser
THE BOSTON GLOBE

WASHINGTON - During his first presidential campaign, Mitt Romney often turned his home state into the butt of jokes, portraying himself as a lone culture warrior in a bastion of gay-marriage activists, scientists experimenting with human embryos, and reckless liberals who had given rise to blighted neighborhoods ruined by poverty.

“Massachusetts ... became center stage for the liberal social agenda,” he told the Conservative Political Action Conference in 2007. “Sort of San Francisco East, Nancy Pelosi style.”

In his second run for the White House, Romney is portraying his home state — and his own role in it — in a different light. Rather than showcase how hard he fought against liberal Massachusetts politicians, he cites how he was able to work with them to get things done. Rather than disparage the state’s political culture, he holds it up as an example of how bipartisanship should be conducted in Washington — and why he should be the one to make it happen.

“I was in some respects lucky that my Legislature was so overwhelmingly Democrat, that it taught me some lessons in how to work with people across the aisle,” he told business leaders last week in Treynor, Iowa. “I recognized from Day One, I’m not going to get anything done unless I have positive personal relationships with the leadership on the other side of the aisle.”

The strategy appears to be aimed at the general election, as a way to cast President Obama as an out-of-touch politician who was

unable to deliver on promises of healing a partisan country. But it also has deep risks, particularly in campaigning against Governor Rick Perry of Texas, who has built himself up as a brash conservative, titled his recent book, “*Fed Up!*” and portrayed Romney as someone willing to compromise away his principles.

Rather than showcase how hard he fought against liberal Mass. politicians, he cites his ability to work with them to get things done.

The Tea Party has also built its brand on an unwillingness to compromise — most recently on a congressional deal to raise the country’s debt ceiling — and is unlikely to look favorably on a candidate preaching the merits of working together.

“Leaders ((are successful)) not by attacking their opposition but by finding common ground where principles are shared,” Romney said at an August town hall meeting in Berlin, N.H.

“Because you see, in our nation, Democrats love America, too. I’m a Republican, I love America. Democrats love America. We need to find places where we can agree and work together to help America.”

Romney advisers note that the approach on bipartisanship does contrast with Perry, who boasts about his state-level governing successes but has not had to contend

with strong partisan opposition to get things done.

But Romney’s campaign is far more focused on the contrasts with Obama, trying to cast the incumbent as both ineffective at getting things done and as being divisive while trying.

“It’s meant to contrast himself not so much with Perry but with Obama,” said a senior adviser to Romney. “Obama is a highly partisan political figure. If you want an example of their differing styles in how to achieve consensus, just look at healthcare. Look at how Mitt worked to achieve consensus in Massachusetts, and how Obama rammed his legislation down the throat of Congress and polarized the country.”

The Obama administration often points out that it has spent years trying to achieve consensus - on healthcare and other issues - but Republicans have been unwilling to bend, at times leaving the negotiating table altogether.

On the campaign trail, Romney often talks about the relationship between President Ronald Reagan and House Speaker Thomas P. O’Neill Jr. as an example of how the wheels of government should turn.

The former Massachusetts governor touts the weekly leadership meetings he held with the Senate president and House speaker - and how most Mondays he would travel down the hallways of the Massachusetts State House to their offices, rather than requesting that they come to his “because I’m the governor.”

“We had snacks and refreshments,” Romney told a crowd gathered for a town hall last month in Miami. “And then we talked about

the challenges the state faced.”

He mentions personal dinners with them and their wives. He brings up the tale of going to their houses on a Sunday to discuss his passion for healthcare reform. (He does this less frequently, given that healthcare is a problematic issue for him in the GOP primary.)

“We have such a broken Washington today that even where there is common ground people won’t come together because they don’t want someone else to have a victory,” Romney said. “In our state we were fortunate enough that when we found common ground, we didn’t care too much about who got the credit.”

Romney’s campaign is far more focused on the contrasts with Obama, trying to cast the incumbent as both ineffective and divisive.

What he left unsaid was that when he staged press conferences, he frequently sought credit. During the healthcare bill signing, Romney was front and center of a well-orchestrated event at Faneuil Hall.

It is all part of a tweaking of the Bay State story he tells to a national audience. In the lead-up to the 2008 campaign, he suggested that he was not part of the Massachusetts political culture.

Oftentimes he went further than just casting himself as a “red speck in a blue state,” and disparaged as-

pects of Massachusetts.

“I was once campaigning once in one very poor neighborhood just outside of Boston when a person came up to me and said: ‘Hey, Mr. Romney. What are you doing here? This is Kennedy country,’” Romney recounted in a 2007 speech to conservatives. “I looked around, and there were a lot of empty stores and boarded-up windows, and I said, ‘Yes, it looks like Kennedy country.’”

He also mentioned his opposition to gay marriage and cloning human embryos for research. “I have stood in the center of the battlefield on every major social issue,” he said. “I fought to preserve our traditional values and to protect the sanctity of life.”

Romney still jokes of the Bay State, telling a crowd last week in Sioux City, Iowa, that, “had I known that I was going to get involved in politics, I’m not sure I would have chosen Massachusetts as the place to do so, as a Republican.” He gets chuckles when he mentions that he’s from a state where, “there are a few Democrats, you may have heard.”

But rather than distance himself from the state, he even told the Des Moines Register last week that he could win Massachusetts in a general election.

“I can’t guarantee I’ll be able to get everything done I want to get done,” Romney said last week in Iowa. “But I can guarantee that I’ll work hard as a leader to work with people on both sides of the aisle and find common ground where our principles are not broken or twisted or bent - but instead where we live by the principles of love and affection for America, and getting America strong again.”

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Diwali Puja

Saturday, 29th Oct.

MIT Chapel

6:30pm onwards

Diyas Rangoli Puja

Dinner and games following puja.

Israel Ruiz takes helm of Institute finances

Former vice president for finance has full confidence of outgoing EVPT Stone

EVPT, from Page 1

Ruiz coordinates with the senior administration to lead many of the Institute’s administrative functions and manage its resources. The EVPT works with human resources, IS&T, Facilities, MIT Medical, and many other departments to ensure that the Institute runs smoothly, providing “services that are worthy of MIT,” as Stone put it, “[setting] the platform to allow students and faculty to do their work.”

Ruiz’s other job, as treasurer, is to be MIT’s chief financial officer. He is in charge of budgeting and financial strategy, managing over \$12 billion in assets and a \$220 million capital budget. However, both the managerial and financial aspects of the position are integrated into Ruiz’s daily functions. He coordinates with the rest of MIT to ensure that “resources are deployed in a manner that best serves the mission of MIT,” he said.

“The ‘and’ means a lot in the title: executive vice president *and* treasurer,” he emphasized.

Ruiz says his main goal is to further the mission of MIT — defined by the Institute as “advancing knowledge and educating students in science, technology, and other

areas of scholarship that will best serve the nation and the world in the 21st century.”

When he was nominated for the EVPT spot, he “embarked on a series of conversations with members of the campus — the community of MIT — to try to understand how to better understand their needs and pursue the mission [of MIT].”

‘It’s amazing to see how many individuals have enormous talents both on the staff side as well as on the academic side.’
—Israel Ruiz SM ’01
EXECUTIVE VP AND TREASURER

Specifically, Ruiz said that one of his themes will be “advancing administrative excellence at MIT,” which encompasses his vision of a “digital MIT” — a push for digitization of administrative systems that he initiated during his tenure as VP of finance.

Ruiz defined one of his goals

as “connecting [MIT’s] individual talents. MIT has tremendous excellence at the individual level, and it’s amazing to see how many individuals have enormous talents both on the staff side as well as on the academic side,” talents that he hopes to connect to get the best outcome for MIT. Ruiz also said he will support Hockfield’s vision of MIT’s increased involvement in manufacturing. “It’s an institute priority, and we try to support institute priorities in the best way we can,” he said.

Ruiz previously worked for four years as MIT’s vice president of finance — a role he assumed under Stone’s tenure as executive vice president and treasurer. Stone worked with Ruiz and “saw the incredible skill he brought to the position [of VPF],” she said.

Stone added that Ruiz “has an unparalleled currency across the Institute in his ability to work with people from all parts of the Institute better than anybody.”

Ruiz said that his time as the vice president of finance will help in his new position. “Being grounded on the financial underpinnings of a very complex institution like MIT for the last 4 years positions me in a platform to understand how we

are moving financially,” Ruiz said. He added that working as the VPF — reporting to both the EVPT and provost — he was able to understand MIT’s academic needs and priorities, and “how the financial resources of MIT propel mission in an academic sense.”

‘Ruiz has an unparalleled currency ... in his ability to work with people from all parts of the Institute better than anybody.’
—Theresa M. Stone SM ’76
FORMER EVPT

As the VPF, Ruiz was at the center of MIT’s finances after the financial crisis hit. MIT’s now-\$10 billion endowment “fared quite well during the recession, comparatively speaking,” said Ruiz.

Ruiz says his office, and MIT in general, has paid close attention to what the recession will do to students coming to MIT and their economic possibilities.

“MIT needs its students and faculty, and this has been a paramount principle protected over the past few years, and it will continue to be in the future.”

More recently, Ruiz lead the successful sale of \$750 million in revenue bonds to support the MIT 2030 program of campus development, which incorporates several major new construction and renovation projects.

The man behind the position

At home, Ruiz has twin daughters, 5 years old, and a son about to turn 2 — he says that his hobby is spending time with them. Before he had children, he had been on a quest with his wife to visit all the U.S. national parks, making it to 10 of them.

He is also an avid soccer fan, and records every soccer game he can over the weekend. He is a fan of his hometown team, FC Barcelona.

“I used to be quite involved with the team back in the day, and now still have very good friends that, when [Barcelona] won the last championship, they overnighted the jersey,” said Ruiz, pointing to the Barcelona jersey hanging on his wall — signed by Leo Messi, no less.



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Watson: Cambridge Challenge accepted

Harvard, MIT students to take on supercomputer in trivia contest

By **Jaya Narain**
STAFF REPORTER

Watson, IBM's champion *Jeopardy!* computer, is making its way to Cambridge to compete in a trivia match with students from the MIT Sloan School of Management and Harvard Business School. The competition, dubbed the "IBM Watson Challenge," will be held at the Harvard Business School's Burden Auditorium on Monday, Oct. 31. The challenge will be preceded by "The Race Against the Machine: The Future of Tech" Symposium at the MIT Media Lab, which will include a number of talks about Watson's creation and the future of the technology. Following the symposium, buses will depart from the Media Lab at 2:15 p.m. for those interested in attending the trivia competition at Harvard.

The "IBM Watson Challenge" is the result of the efforts of Professor Erik Brynjolfsson '91 of MIT Sloan and Willy C. Shih of the Harvard Business School. Brynjolfsson said the tournament stemmed from a mutual desire to highlight "some of the ways that technology is changing business." Brynjolfsson said that the new technology could revolutionize day-to-day business.

"[The technology] could be used to answer call center questions, to do the work of lawyers, to help in the medical field," Brynjolfsson said. The symposium will focus on exploring such applications and examining their implications in the future.

The symposium will also include a keynote speech by David Ferucci, the "father of Watson," who will speak about the development of Watson. The other panels will cover the potential of the technology and the effects it might have on business and the economy.

In the trivia competition, teams of three students each from MIT Sloan and HBS will compete against each other and Watson. The MIT representatives were chosen through a series of playoff tournaments that were open only to Sloan students. At Harvard, two students who are *Jeopardy!* alumni were responsible for organizing the team.

Watson, a supercomputer that occupies an entire room, will be present in a smaller — though equally competitive — version of itself at the competition this Monday.

Brynjolfsson encouraged MIT students to attend the competition to provide support for their peers.

"We would love a good showing of MIT students to cheer them on," Brynjolfsson said, "There's room for 200 MIT students, and we wouldn't want to be outnumbered [by Harvard]."

Watson was unveiled last February in a three-part televised competition between Watson, Ken Jennings, and Brad Rutter — the two most successful *Jeopardy!* contestants in history. Watson dominated the overall competition, finishing with \$53,147 more than second-place finisher Jennings. Still, in the third and final segment of the competition, Jennings trailed Watson only slightly, suggesting that the computer may not be entirely unbeatable.

But, Brynjolfsson emphasized, Watson "goes beyond the game."

"The implications for the economy and for MIT students' careers — and everyone's careers — is really profound," Brynjolfsson said, "This technology is changing the world."

The MIT Center for Digital Business is sponsoring the event. More information about the events and the symposium agenda can be found at http://ebusiness.mit.edu/docs/ibm_watson_oct2011.pdf.



CHRISTOPHER A. MAYNOR—THE TECH

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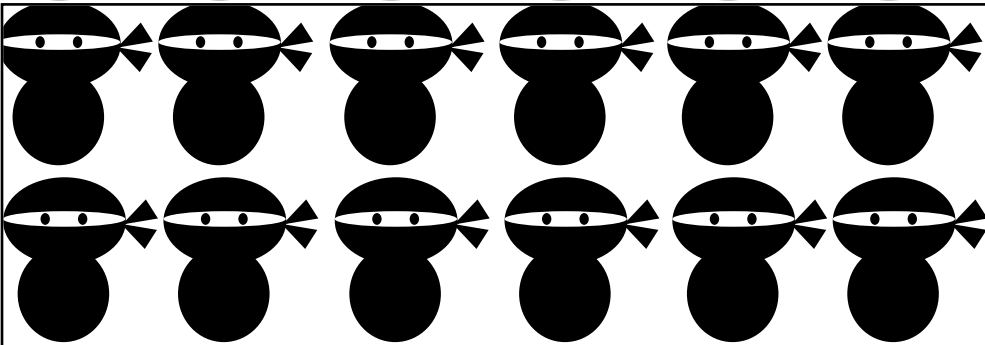
Professor Ian Waitz, MacVicar Faculty Fellow and Dean of Engineering

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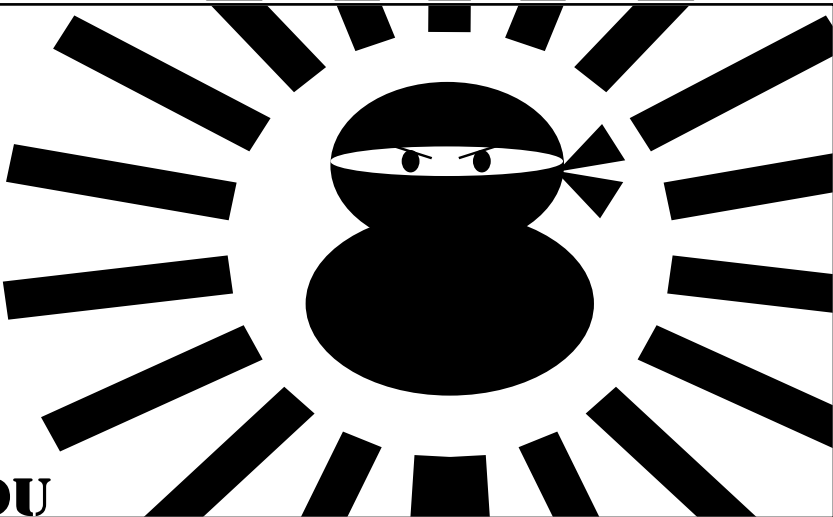
Lecture: 3:30 – 4:30 PM

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UCSF trial offers new hope for melanoma patients

University of California San Francisco successfully tests new, highly effective drug treatment

By Victoria Colliver
SAN FRANCISCO CHRONICLE

Shannon Jimerson, an advanced-stage melanoma patient being treated at UCSF, did a little dance this week while still sitting on the exam table after she got the news she desperately wanted to hear.

Nine months after starting a combination drug therapy in early-phase clinical trials, her tumors were continuing to shrink.

“You have very minimal disease left,” said Dr. Alain Algazi, a skin cancer specialist.

Algazi told her that her tumors had shrunk by 85 percent, leaving her with just a few “lousy little tumors” he hoped the drugs would continue to target.

Jimerson, 34, of Fairfield has benefited since January from a growing body of research that is giving new hope to patients with melanoma, the most deadly form of skin cancer. Melanoma is diagnosed in about 68,000 Americans annually and kills more than 8,700 each year.

Before entering the trial, Jimerson wasn’t sure she’d be alive at this point. Her body had become

so riddled with tumors that she was afraid to lay a hand on her own skin for fear she’d find a new lump. She did find a new spot, on her shoulder, and was scheduled for a biopsy two weeks after she started taking the investigational drugs.

“But by the time I got there, there was nothing to biopsy,” said Jimerson, the mother of two young daughters and children’s pastor at her church. “It was absolutely a miracle, this drug.”

The combination of the two oral drugs, both being developed by GlaxoSmithKline, are designed for people who have a genetic mutation that is found in about half of all melanoma cases. The drugs target two different points along a pathway the cancer uses to proliferate.

At least half and up to as many as 77 percent of 71 patients in the earliest phase of the trial experienced reductions in tumor size by a third or greater, researchers said. The company is seeking to enroll about 280 patients in second-phase studies and is already planning for third-phase trials.

The results are promising considering most of the current therapies for melanoma have been found

to work in fewer than 20 percent of patients, and often have far lower levels of effectiveness.

“This is definitely a great moment for patients with melanoma,” said Kiran Patel, GlaxoSmithKline’s director of oncology research and development. “Our goal is to progress science and really bring new and better options for patients.”

Patel said he could not estimate when the company will seek federal approval for the drug combination. “We remain enthusiastic about targeted approaches and will keep doing the right studies so we can get those answers,” he said.

The drug worked in about 50 percent of late-stage melanoma patients with the mutation.

Until this year, the last drug approved for melanoma was in 1998. But in August, the U.S. Food & Drug Administration fast-tracked the approval of a drug from South San Francisco’s Genentech Inc. called Zelboraf, which targets and inhib-

its the genetic mutation known as BRAF V600E. The GlaxoSmithKline drugs work on that same pathway, but also targets a second point on the path.

“We haven’t had any real breakthroughs since the mid ’90s, and now it’s like every few months we have something exciting,” said Dr. Adil Daud, director of UCSF’s Melanoma Program and chief investigator of the trial.

Scientists discovered that when the protein BRAF is mutated, it can become hyperactive and cause cells to grow out of control. The Genentech drug was found to work in about 50 percent of late-stage melanoma patients with the mutation.

While researchers found the results astounding, especially considering that they previously had little to offer people with metastatic melanoma, they quickly realized that the disease started progressing in some patients after several months on the drug. They suspected the cancer was finding a “work-around” in some cases by using a pathway regulated by another protein called MEK.

The GlaxoSmithKline trial drugs Jimerson has been on since January

go after both BRAF and MEK. Genentech, for its part, is in clinical trials for its own combination therapy using Zelboraf, its already-approved BRAF inhibitor, and a MEK inhibitor the company is developing. UCSF is involved in that trial as well.

The hope is that patients will be able to stay disease-free longer on a drug that blocks the cancer’s pathway in two places rather than just one.

“It’s like a river being blocked by two dams,” UCSF’s Daud explained. “Maybe you’ll overflow the first dam, but then the other part will take over.”

Daud’s colleague, Algazi, said researchers have the challenge of figuring out what other pathways exist and what drugs can be created to fend off those new routes to give the disease a “long-term, knock-out punch.”

For Jimerson — who has experienced few side effects other than a mild rash, some fatigue and an occasional fever — the trial means she has hope for the future.

“It allows me to live my life,” she said. “My kids know I have cancer, but cancer isn’t the focal point of our lives.”

SMBC, from Page 19

DO SOMETHING CUTE!
I NEED TO PAY RENT.

Solution to Sudoku
from page 8

1	2	8	7	6	9	4	3	5
4	6	9	8	3	5	1	2	7
7	3	5	1	4	2	8	6	9
8	9	7	6	5	1	3	4	2
2	5	4	9	8	3	6	7	1
3	1	6	4	2	7	9	5	8
9	7	3	5	1	6	2	8	4
5	8	2	3	9	4	7	1	6
6	4	1	2	7	8	5	9	3

Solution to Crossword
from page 7

H	O	M	I	N	G		P	I	C		E	B	B	
O	N	A	G	E	R		I	S	A	B	E	L	L	A
T	E	N	O	N	E		T	O	R	I	A	M	O	S
M	I	G		E	E	L	S		B	O	T	T	O	M
I	L	I	E		N	O	T	S	O		E	R	M	A
C	L	A	S	S	C	L	O	W	N		N	E	E	T
			T	W	O		P	U	F	F		E	R	I
			S	H	A	L	T		M	O	R	E	S	
S	E	A		B	L	A	H		O	A	K			
T	A	R	P		A	P	A	R	T	M	E	N	T	S
A	R	G	O		R	E	C	A	P		S	I	R	E
P	B	A	N	D	J		K	I	R	K		N	I	E
L	O	S	T		S	O	U	L		I	N	A	J	A
E	N	S	E	M	B	L	E		N	E	W	A	G	E
R	E	O			S	T	S		T	E	N	S	E	D

Solution to Techdoku
from page 8

1	6	5	4	3	2
5	4	3	2	1	6
2	1	6	5	4	3
4	3	2	1	6	5
3	2	1	6	5	4
6	5	4	3	2	1

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Seniors celebrate final home victory enthusiastically

SPORTS STAFF


The second set picked up from the high energy level of the first set. Exceptional serves by Cecily

MIT will next play against the U.S. Coast Guard Academy on Oct. 29 at 1 p.m. to wrap up the regular season.



freshmen on the women's volleyball team motivate the team on senior night.

SPORTS STAFF




CAMBODIAN DREAM

REBUILDING CAMBODIA BY EMPOWERING ITS WOMEN

NOVEMBER 3, 2011, 7:30PM
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ROOM 123

Professor Alan Lightman

INTRODUCED BY:
Professor John Ochsendorf,
Department of Architecture



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ABOUT THE SPEAKER
PROFESSOR LIGHTMAN is a novelist, essayist, physicist, and educator. He was formerly John Burchard Professor of Humanities and Senior Lecturer in Physics at MIT and is now Adjunct Professor of Humanities. Lightman was one of the first professors at MIT to receive a joint appointment in the sciences and the humanities. His best known novel, *Einstein's Dreams*, was an international bestseller and has been translated into thirty languages.

Reception to follow the talk in R&D Pub, 32-G410. | *More details at <http://writing.mit.edu>*